1: Coon E-5 (1926-1927) 1931 MX3 Rif MX3

243 [352] 241 805 793 241 805

for several weeks. At the end of this time the poison is supposed to be washed out, and the product is dried and eaten.

thinifin, peas, *ibauen*, broad beans, and *er athis*, lentils, like *shasana*, are grown as grains.

The Calendric Cycle of Agricultural Events. Agriculture in the Rif and in the Senhaja country is conducted on the basis of the old Roman calendar, the names of the months surviving in a form very little altered from its original character. I was unable to transcribe these names exactly since I could find no one who knew them accurately and was willing to reveal them. Knowledge of them is confined to the *fkih*, the preceptor or religious head of each group of villages, and to his students. The *fkih*, while delivering sermons at the mosque on Fridays, reveals the agricultural program for the following week and tells the farmers just what activities the season merits. To reveal this calendar system and the agricultural annotations which go with it woud be to relinquish a portion of the awe in which the religious leader is held.

The preceptor likewise knows the Arabic lunar calendar and is the only one able to tell when religious feasts of Arab origin are due. The farmers reckon only by the four seasons, a solar conception which may well antedate either the Roman or the Arabic system. They know, however, about when each activity is due, since they are in the habit of repeating the program every year. and could probably get along as well without the learned assistance of the *fkih* as with it.

A rough outline of the year's activities follows.

January. In this month the farmers plough their land. (See plate 9.) When this has been finished they sow barley and *shasana*, and later broad beans and lentils.

February. If the bean and lentil sowing has not been finished in January, it continues over into early February. Sometimes it continues until the end of the month.

March. About the first of March the farmers hoe the mountain slopes and sow rye and peas.

April. On the first of April they commence planting the vegetable gardens with potatoes, beans, carrots, turnips, onions, and peppers.

May. This is the month for trees. The farmers dig around the roots, fertilize them with manure, and water them. After the trees have been cared for in this way and pruned, the soil about the grapevines is loosened and fertilized with manure, without water. At this time the grapevines are also pruned.

June. Toward the beginning of June, or sometimes during the last week of May, the farmers reap the *shasana*, lentils, barley, and peas, in the order named. The barley is cut with sickles; the others are pulled up by the roots and laid aside for threshing. After this has been done the farmers irrigate the terraces in which the *shasana*, lentils, peas, and barley have been growing (see plate 9) and plant them with maize. The plants previously reaped are then threshed, first the *shasana*, which is the most susceptible to insect pests and cannot wait, then the lentils and peas, and finally the barley. All this threshing is done with cattle, donkeys, or mules, which are forced to trot around a circular threshing floor. (See plates 10 and 11.) Toward the last of June the rye is cut, and the women thresh it by hitting the heads of the sheaves against sticks held in the hand. It is tabu to thresh rye with cattle, just as rye is never planted by means of domestic animals or the plough. The whole rye complex seems to antedate or at least to be negatively associated with the cattle and plough complex.

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July. In July, forty-five days after having planted the maize, the farmers reap it, fertilize and water the terraces, and set out the second crop. This second maize is a different variety from the first, and grows more rapidly. After it has ripened it is left in the ground until December or January, when it is removed in time for the next season's ploughing. Towards the end of July the almonds and walnuts are picked and stored away.

August. About the first of August, after the second crop of maize has been planted and the almonds and walnuts picked, the farmers gather the turnips, potatoes, and small beans, planting in their stead more potatoes, more turnips, and black beans. They likewise set the onion seed out in beds, and after the shoots arrive cover them with manure and branches to keep them warm during the winter. Toward the last of August the late figs are picked, split, and set to dry. Figs intended for sale rather than for local consumption are not split, but are spitted on sticks of wood. At this time the farmers also pick pomegranates and carob beans.

September. September is the grape season. Whole families repair to the precipitous vineyards with baskets to pick, sleeping in the vineyards at night, and feasting and playing games. This is the season of festival, and likewise the time when weddings take place. At this time, when the families are sleeping in the vineyards, raw garlic is eaten plentifully, since this is the only time of year in which people do not live in the house, and it is considered shameful to have an odor of garlic about the house. After the grapes have been picked the women gather the root called *fathis*, which they burn. The ashes, mixed with water, are used to wash the grapes before these are set out to dry. Grapes washed in this way are said to dry more rapidly, not to rot, and to form better raisins.

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October. Toward the end of October the olives are picked and stored away packed in salt until the farmers find leisure in which to grind them. Olives can be kept two years in storage without detriment.

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November. In November the farmers graft trees, using beeswax in the process just as it is used among modern farmers. They tie the waxed joints with cloths, which they leave on until the following spring. In October and November the men cut wood and brush for their fires, enough to last them through the winter. The women and children help them to bring this wood in on their backs.

December. Toward the end of this month and in early January, those farmers who possess orange trees pick the fruit. Some of it is eaten, but much is sent to Fez to be sold. During the winter months, when it is stormy outside and farming is ended, the men sit inside the house working with wood, fashioning spoons, hoe-handles, and ploughs, and do what repairing is necessary upon their houses.

This calendar of events keeps the Riffian farmers very busy most of the time, and as a rule they are most industrious and energetic workers.

In the regions where there is no terraced irrigation (left white upon map 2[1]) only one crop of maize is grown, and but one crop of vegetables. This is compensated for by the relatively greater abundance of arable land in the east and other low-lying districts. The mountain people depend to a great extent upon vegetables, especially the leguminous varieties, and dried fruits and nuts, while the lowlanders go in more extensively for wheat and barley.

[1] See p. 52.

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304 852 875 gives it back. The *akovani*, on the other hand, depends largely upon circumcising for his livelihood, and is always paid. Among the nomads he generally receives a dollar or two; among the Galiya his fee is fixed at three dollars and a sheep.

MARRIAGE

585 The wedding rite is an act, or series of acts, of great importance in the Rif, and requires the expenditure of considerable time, effort, and money. It contains more variable elements of custom than any other single social phenomenon.

584 Before a wedding is to transpire several things must be settled: the identity of the couple, the consent of others interested, the amount of financial compensations to be made, and the date. Both the boy and the girl have considerable choice in the matter, unless their parents feel some strong compulsion dictated by political expediency. Since all women go unveiled in the Rif, and it is freely permitted for boys and girls to talk together, the children have ample opportunity to become acquainted with each other and to form preferences for particular individuals of the opposite sex.

These opportunities for conversation and observation seldom go so far as to include recognized meetings or courtships, but are usually, to the outward eye at least, confined to casual encounters in the course of daily occupations. Assignations are held in the utmost [836] secrecy through fear of shame and punishment if discovered.

582 584 By the time the boy has arrived at the age of sixteen or seventeen and the girl at fourteen or fifteen, which are the usual ages at which young people are married, they often have formed distinct preferences and have made up their minds whom they desire to marry. The situation is totally different from that of the Arabs, among whom the groom is not supposed to have seen the bride unveiled until the actual nuptial night. Although the ages given above approximate the mean in this respect, they are by no means fixed. Some boys are married at fifteen; others delay the ceremony until after they are twenty.

A serious student who intends to become a schoolmaster or clerk may not be married until considerably later than the age of twenty. By the time a boy has reached the age of [805] fifteen he has already become uncertain as to his exact age, and by the time he is twenty he cannot usually tell within three years how old he is. This renders impossible any definite statements as to the marriage age.

582 Marriages are as a rule exogamous between *veins* and endogamous within *bones*. It is considered incestuous to marry the daughter of a paternal uncle, but proper to marry the daughter of a maternal aunt or uncle or of a paternal aunt. In this way cousin marriage frequently takes place, and most of the *bones*, on account of their small size, are thoroughly inbred. Marriage between *bones* involves the alliance in war of the *bones* involved, and hence is often discouraged through fear of the whole *bone* being dragged into a struggle in which it is not personally interested. On the other hand, a *bone* which is not sure of its martial standing and general security may seek such alliances with stronger *bones*. The traditional distaste against such marriages, however, generally prevents them unless there is good reason for their occurrence. Marriage by preference is usually endogamous within the *bone*, unless two *bones* are so close together that intimate acquaintances may arise readily between the children of them. Unions dictated by the performance of a magical compulsion by one *bone* upon another are seldom refused.

787 Andjra, Ait Waryager, Ait Nder, Aglu). In the /55/ first ploughing season, however, dreams are generally untrustworthy, because Sitan then turns them topsy-turvey as the plough turns the earth.

777 [58] Muharram, the first month of the Muhammadan year, is in
805 Morocco called s-shar de l-'asur (l-asor, l-'asur), "the month of the
796 'Asur", or simply l-'asur (l-'asor, l-'asur) or, among the Berbers, by some Berberised form of the same word. It has derived this name from the feast on the tenth day of the month. This day, called nhar (or yaum) 'asura ('asora, 'asura) or nhar l-'asur, is practically the Muhammadan New Year's day. Much less notice is taken of the first day of the month; but from a ritual point of view the first ten days sometimes form a period by itself. Townspeople call the first day ras l'am, whereas among country-folks this term is used for the first day of the solar year.

777 The month of the 'Asur is rich in magical qualities. According to
796 Sidi Halil the ninth and particularly the tenth day are blessed days, and on the latter many sacred or wonderful events are said to have taken place in the past. In Morocco baraka is also generally ascribed to those days. Magic, good or evil, is extensively practised on the 'asura [59] day and on the preceding night (lilt 'asura), which is said to favour the witches.

[73] I was told that among the Ait Waryager the farmers give on the 'asura day a tenth part of their sheep and goats to the scribes as zzka ra'sor, believing that there otherwise would be no baraka in their flocks.

[75] The Ait Waryager consider it very meritorious to hoe the ground on their fields or in their gardens on the 'asura day, even though it be only a little, but they do no other agricultural work on that day. The schools are generally, I believe, closed for three days.

777 [76] Among the Ait Temsaman no brooms must be made on the
784 'asura day. It is necessary to refrain from sleeping in the daytime on
796 that day (Tangier, Ait Warain); he who does not observe this rule will become ill or be sleepy throughout the year (Ait Waryager).

In Andjra and among the Ait Waryager there is a similar taboo of longer duration, lasting for the first ten days of the month; the latter maintain that a child conceived in that period would be deaf and dumb, and they consider it advisable to refrain from sexual intercourse even till the end of the month.

787 powerless, whether the Christians will trouble the country or leave it in peace, and whether the people will keep in good health or there will be many deaths. As to the manner in which this kind of divination is practised, none of the many Arab and Berber scribes whom I have asked about it has been able to tell anything beyond the general statement that it is done much in the same way as is the fortune-reading in the blood. But I presume that it must be more complicated, as [791] there are only special persons, called kett afa (sing. kett af, from kt ef, "shoulder"), who are versed in it.

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RITES AND BELIEFS CONNECTED WITH CERTAIN DATES OF THE SOLAR YEAR

796 While the Muhammadan year is a lunar year, the Moors are also 805 familiar with the Julian calendar, especially in country places, where the principal occupations of the people are regulated by the seasons. They call the months by their Latin names, more or less modified. January is called yennayer or yennair (Fez), nnair (Ait Sadden, Igliwa), inneir (Aglu); February, yebrayer (Fez), hobrair (Ait Sadden), kobrair (Ait Warain), brair (Igliwa); March, mars (Fez), mars (Ait Sadden, Igliwa); April, yebril (Fez), ibril (Ait Sadden), ibril (Igliwa); May, miyyu (Fez), maiyu (ibid., Ait Sadden), maiyu (Igliwa); June, yunyuh (Fez), yunyuh (Ait Sadden), nunyuh (Igliwa); July, yulyuz (Fez), yulyuz (Ait Sadden), lulyuz (Igliwa); August, gust (Fez), gust (Ait Sadden, Igliwa); September, sut anbir (Fez), sutenbir (Ait Sadden), sutanbir (Igliwa); October, kt ubar (Fez), htobar (Ait Sadden), ktobar (Ait Warain), ktubr (Igliwa); November, nouwanbir (Fez), nuwenbir (Ait Sadden), nuwanbir (Igliwa); December, dujanbir (Fez), dujenbir (Ait Sadden), dujanbir (Igliwa).

The solar year is divided into twenty-eight manazil (sing. menzla), each containing thirteen days, with the exception of the jebha (18th-31st July), which contains fourteen. [160] The first menzla is n-natah (in the written language of the scribes n-natah), from 23rd March to 4th April. The following ones are l-butain (5th-17th April); t uriya (t-turiya), 18th-30th April; d-dabaran, 1st-13th May; l-haq'a, 14th-26th May; l-han'a, 27th May-8th June; d-dira', 9th-21st June; n-net ra (n-natirah), 22nd June-4th July; tarfah, 5th-17th July;

796 805 jebha, 18th-31st July; l-harat an (l-haratan), 1st-13th August; s-sarfa, 14th-26th August; l-'auwa, 27th August-8th September; s-samak, 9th-21st September; l-gafar (i-gafar), 22nd September-4th October; j-janaban, 5th-17th October; l-iklil, 18th-30th October; l-qalb, 31st October-12th November; s-saula, 13th-25th November; n-nu'aim, 26th November-8th December; sa'd l-belda, 9th-21st December; d-dabeh, 22nd December-3rd January; sa'd bla' (sa'd l-bula'), 4th-16th January; sa'd s'oud (sa'd s-su'ud), 17th-29th January; l'ahbiya, 30th January-11th February; farg l-moqaddam, 12th-24th February; farg l-mohhar (farg l-mu'ahhar), 25th February-9th March; batna l-hot, 10th-22nd March.

The year has four seasons (fosol, sing. fasl). Spring (fasl ar-rbe'a) commences on 15th February, summer (s-saif) on 17th May, autumn (l-hrif) on 17th August, winter (s-set wa) on 16th November. The forty days between 12th December and 20th January inclusive are called liali, and the forty days between 12th July and 20th August inclusive are called s-smaim or s-smaim.

To various dates of the solar year magical qualities are ascribed, and this leads to the observance of many positive rites and taboos.

796 [162] The Ait Waryager call the last day of the old year and the first day of the new imgaren, "sheikhs".

[166] The Bni 'Aros eat siyoha on New Year's eve and sfen j on the next day. The Ait Waryager eat eggs and wheaten bread on the former occasion and seksu with fowl on the following evening.

[169] Among the Ait Waryager women who have cows and are in the habit of making butter go on New Year's day to a scribe and procure from him a charm which he writes with a needle on a bullet; this charm is hung on the wooden hook (ashum) from which the earthenware churn (aqasror) is suspended, and is left there till the following New Year as a protection against witchcraft.

[765] [735] [174] The Ait Waryager, again, take on New Year's morning iuzan, or porridge, to the graves of their deceased relatives and distribute it in charity to children and poor people.

[178] At the same time I have also found quite the contrary belief, that it serves as a protection against snakes and scorpions by making them blind if it touches their eyes (Tetuan, Andjra, Bni 'Aros, Tsul, Ait Sadden) or even killing them (Tetuan, Ait Waryager, Ait Warain), whereas if there is no rain in the nisan their eyes are said to become like fisan (hoes) and their mouths like kisan (cups).

671 agree to the abovementioned truce for one year starting from the present
628 date. All of them appeared for judgment in front of the shiyukh of the
613 Wednesday Market (Suq al-Arba') which exists in the vicinity of Sidi
728 Abu al-'Afif; attendance at this act was completely general, as there
[443] also came notables such as the blessed, distinguished and excellent
[686] sharif Sidi Ahmad the son of the celebrated saint Sidi Misa'ud, from whose grace God has let us avail ourselves; al-Hajj Haddu bin Tahir al-'Abbasi; the shiyukh of Ajdir; the shiyukh of the Murabitin al-Jilmamiyin; and all in general, each of the parties arranging that in case either of them should break off the aforementioned truce in any way before the stipulated time of one year has elapsed, it shall pay a fine of 2000 duros (i.e. 20 x 100) to the shiyukh.

671 After responding with their goods and estates to the completed
628 arrangement, it was put into effect in the presence of the aforemen-
613 tioned shiyukh in the latters' shop in the aforementioned market; and it was accepted in full and in good faith, with neither party having the right to retract in either the present or the future, each one of them making itself responsible for the fulfillment of what has been set down and for which only those mentioned here have the responsibility.

(The obligation to) payment (of the fine) and the agreement are both complete, as indicated. (The undersigned witnesses) have testified to the testimonial capacity of everyone concerned, that on this day, in the interior of the aforementioned shop, each person concerned, among those known by sight and name, is of sound mind and memory and thus
[805] capable of testifying. On the first Wednesday of Rabi' al-Awwal of the Prophet, in the year 1335 (December 27, 1916).[11]

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property in that belonging to him, in conformance with traditional law.[25]

695 Those who attended the present (act) brought their testimony to the above according to the requirements of the interested parties. 805 --In the middle of Jumad al-Awwal of the year 1336 (February 27, 1918). --The 'adl, Muhammad bin Muhammad bin al-Hajj al-Warnuri.--Another, whose name is not known.--Another, Muhammad bin Sidi 'Abd al-Qadir al-Ghamri.

B) Commentary:

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The social disintegration which Rifian society has reached is proven by these individual agreements between dharfiqin (Blanco: note 1, corresponding to text of qanun). In the face of helplessness or irregular functioning of higher-level associations, the poor tribesmen, before falling into complete anarchy, hastened to conclude an agreement with a neighboring group in order to attenuate that anarchy, succeeding in the hard struggle for life on a poor soil. These agreements thus formed true islets of irregular and variable peace, anchored in functional (sic) anarchy.

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The necessity of agreements between lower-level lineages, who were abandoned by the rudimentary organization, obeyed, according to my understanding, those most curious periods which followed the public declaration of anarchy in the suq, when one powerful group managed by force to sustain the punishment, breaking the truce.

614 As the dispute was generalized between two preponderant rivals, the unaffected groups, before falling into anarchy, and with that notable instinct of self-defense, worked to bring about these agreements,

574 (perhaps to deliver their portion of the expenses necessary to maintain
689 the guest), and in case one of them is opposed to going, he shall be fined a goat or one duro.

695 (Blanco: paragraph f) Valid and complete testimony. Whoever
784 should change or alter this agreement shall answer to God. Both the
693 undersigned notaries know, personally and by name, all the parties who effected the present agreement.

685 (Blanco: paragraph g) In case anyone should open a pond or an
312 irrigation ditch (thus letting out the water), he shall be fined one duro for the pond and one mithqal for the irrigation ditch.

686 (Blanco: paragraph h) Regarding the contract with the schoolmaster, if anyone should be opposed (to contributing his share to the scholmaster's annual ration of barley), he shall be fined 10 uqiyyas.

689 (Blanco: paragraph i) If those mentioned earlier in the present agreement should assemble and agree on some useful matter, and if in this case there should be anyone (of the members of the abovementioned jama'a) who is opposed (to carrying it out), he shall be fined one duro.

622 (Blanco: paragraph j) Their shaikh is 'Ali bin Muhammad bin 'Azzuz. Everything that he orders (literally, "says") must be done
693 (literally, "will be"). The parties attending know the value of the present agreement, and in virtue of this, both the undersigned notaries bear witness that they are in a perfect state of legal capacity (i.e. of sound minds and memories) (in order to be able to effect the present
805 agreement) and that they know them. On the first (day) of Safar al-Khair of the year 1285 (May 24, 1868).

000 The slave of God--may He be glorified--Muhammad al-Khattabi and 'Umar bin Muhammad, etc.

682 limits of his land (i.e. within the limits of the clan territory of the Bani 'Abdallah) shall pay (a fine of) 2000 duros; (this shall be the fine) if he committed the deed alone; but if several (men) committed it, each one (shall pay a fine of) 2000 duros. Whoever should take
687 683 justice into his own hands (literally, "ransacking to collect a debt") shall pay 50 duros, and the same for whoever should attack another on
689 the path. Whoever should provoke an incident in the market (shall pay) 10 duros.

683 (Blanco: note d) Whoever should unsheath a dagger, making it glitter, with intent to attack (literally, "injure"), shall pay 5 duros. Whoever should wound the head of another with stones (shall pay) 5 duros. Whoever should attack another with a stick, causing blood to flow and provoking a scandal, (shall pay) 15 duros, and if he should not cause blood to flow, (he shall pay) 10 duros.

613 (Blanco: note e) Whoever should come to the defense of one of
681 his brothers (i.e. agnates) or of any other person, as is customary among those of the same party (i.e. same lineage), (shall pay) 5 duros.

681 (Blanco: note f) No request (for pardon) shall be listened to, nor shall mercy be granted to any of those who have incurred the above (punishments).

805 (Blanco: note g) For the application of what has been made
443 manifest above, it shall be considered that Tuesday begins at dawn and ends with the sunset; this is to apply to them (those of the Bani 'Abdallah) and for strangers (regarding the application of the above), market (day) shall be considered as having a duration of three days.

695 With regard to the above, the testimony (which both 'udul)
693 registered took place, the witnesses being in a perfect state of legal

capacity (i.e. of sound mind and memory) in order to testify.

(Blanco: note h) If, regarding a murder, there is brought sufficient proof (against the guilty party), the abovementioned fine shall be imposed upon him, and in case sufficient proof does not exist, he shall swear (for acquittal).[48]

(Blanco: note i) Regarding the abovementioned beginning (i.e. on Tuesdays), it is ended at the hour of the 'isha (i.e. at the dinner hour or hour of the sunset prayer). Amen.

On the sixth day of Ramadan the Magnificent of the year 1335 (June 26, 1917). Servant of his God, may He be exalted, Muhammad al-Ghalbzuri, may God be benevolent toward him, amen. (Signature). Servant of his God, "Abd as-Salam bin al-Hajj Muhammadi al-Ghalbzuri, may God be benevolent toward him. (Signature).

Legalization by the qadi. Praise be to the One God. (Both 'udul) have put down its contents, which are accepted and to which I give faith. Servant of his God, Muhammad bin 'Umar at-Tuzani, may God be benevolent toward him, amen. (Signature).

B) Commentary:

This qanun manifests in a clear way how social law is made among Rifians: where the legislators gathered to agree on it, how it was made public, whom it obligated, the jurisdiction in which it was exercised, the objective sought and the means of attaining it.

It enumerates the crimes and their sanctions, it distinguishes perpetrators and accomplices, provokers and auxiliaries, natives and stranger. It eschews pardon, it demands proof and it shows the reality of the social unit, the "fraction" (author's italics--the translator

A, [See p.306-- Analyst]

685 In the same way, they agreed to impose fines for all damages or injuries which are caused, such as theft, etc.

Whoever should steal a sheep or a goat shall be fined 10 duros, and whoever should steal barley, broad beans, etc., from someone else's land shall be fined 5 duros.

681 In summation, all injuries or damages caused by one of them (the Bani 'Adhiya) against another (of them), a fine shall be levied from him, whoever (the party guilty) of the injury or damage may be.

671 In accordance with the above, their declarations were put down, as they have been expressed and explained. Valid and complete testimony. The parties who took part in the present agreement know [693] the value of this agreement, and because of this, both the undersigned notaries testify to what is set down and to the fact that they (the Bani 'Adhiya) are in a perfect state of legal capacity (of sound minds and memories) and that they are known (personally) to them (the notaries).

805 On the second day of the divine month of Jumad ath-Thani of the 600 year 1332 (April 28, 1914). Servant of his God, may He be glorified, 'Abd as-Salam bin 'Abdallah at-Tafrasti, may God be benevolent toward him. Servant of his God, Muhammad bin 'Aisa at-Taxurakhti, may God be benevolent toward him.

B) Commentary:

671 This synthetic qanun of the Aith 'Adhiya, drawn up in conformity with the dictates of the purest tradition, contains within it suggestions analogous to the rest of the documents which we have studied.

[771] It is a pact (author's italics), by which those who have agreed on it must in future regulate their coexistence and traditional

Taqal'ait; and Muhammad bin al-Hajj Hadidush. All these are faithful (adherents) who are under the orders of their shuyukh, each one (obeying) the orders and countermands of his shaikh. May God help them and put them into agreement (i.e. make them agree) for the common good, because in this is founded the pleasure of God; may God cause all to stay in power, with His protection and generosity.

[805] At the end of the divine month of Rabi' al-Thani of the year 1325 (June 10, 1907).

Servant of his God, may He be glorified, Mhammad bin Muhammad bin Mhammad al-Ghalbzuri, may God be benevolent toward him. (Signature).

B) Commentary:

671 This qanun, following the criteria by which the others have been analyzed, appears the least suggestive, due doubtless to the redundancy of patronyms which it contains, none of which the editor, who is a perfect chronicler of this society, dares suppress in his personal adulation, while he forgets to consign with analogous detail the principal material, the punishments of crimes which are the object of the industrious and complex body politic.

He would have beencapable of writing the names of all his constituents, surpassing his own record, which he undoubtedly left established with such an interminable list, the reading of which few could finish, from not doing it with the derisive tone and with the falsetto voice to which they are accustomed, revealing the affected, pompous, superficial and routine mentality of the Arabic schoolroom, very adherent to form but exempt of content[70], which the pure Rifian

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[627] amicably by irrigation specialists (aquwwām, pl. iquwwamen). In the latter instance, these specialists estimated the amount of damage done, and the individual who caused it had to pay for it.[120] The only penalty, most of the time, was indemnity of such damage, through, above all, small reparation projects. In case a man was also punished by fining, the fines were converted into improvements in the irrigation
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624 ditches. The irrigators did not make up special communities with their own jurisdiction or functionaries dedicated to the inspection and fulfillment of the agreements, because this rudimentary society was not fond of bureaucrats(!).....

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423 The difficulty with these irrigation agreements rested primarily, more than on the distribution of the flow of water, on rather the outline of the ditch, for which it was necessary to acquire previously the consent of each one of the property owners on whose plots of land it ran over; these individuals did not ordinarily give in unless they themselves were given an irrigation turn; and, in addition, they made it clear that the ditch was not to cross their land but to follow the boundaries around it.

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[805] Irrigation turns, in the instances dealt with here, are simple, and correspond to the same notion which will later be discussed for the bigger water-courses, and which is based upon the principle of equitable distribution, with the utilization of natural means to calculate the time. This is reduced, once the number of turns is known, to fixing the duration of these and the order in which they occur. This customarily takes place at the point of origin of the ditch or dam; once assembled, the irrigators draw lots, by which each one of them puts down a straw while another, with his back turned,

312 uggugen) for the source or origin of irrigation ditches and as partitions of the waters on both banks. After a dam has been set up, built to hold as much water as possible, it is converted into a ditch-head, in which the necessary outlets are made, and it thus acts as the point of origin of the principal or primary ditches which have a permanent flow of water; these are usually two or three in number. Although [183] these outlets are irregular, the Rifians say that a half or a third of the water is utilized in distribution; and although this is what happens in practice, in theory the distribution is far from perfect, as the tribesmen do not take into account the width nor the depth of the outlets; and these are improvised, if not actually variable. The primary ditches are distributed and divided in this way into secondary branches, if these are necessary, in which the irrigation turns proper are initiated, which means that they only take up water for twenty-four hours; therefore, if there are four secondary ditches, each one [805] will take up water every four days. These secondary ditches are subdivided in turn into other tertiary branches, also of periodic or intermittent flow, which do not take up water other than during the day or at night; and these originate the irrigation furrows of individuals which do not take up any water other than at certain hours, which are determined by those of the principal daily prayers.

312 591 613 596 This distribution of irrigation water is intimately linked to the Rifian lineage system, to the dharfiqth (which tends to have a 24-hour turn) and its component ijujga, and it is completed with one order of turns begun in the tertiary ditches through which if one of these ditches, during its turn, takes up water during the daytime,

312 571 [613] [596] in the following turn it will take it up at night, and with another order among the irrigators in which the first in one turn will be the last in the next. These two classes of turns, this order of irrigation, is usually set up for the whole duration; when it is begun, the irrigators draw lots with small sticks or twigs, and, at other times, it is set up differently every day. The transfer of

312 571 425 [432] [805] [435] turns is free, as is the decision of the person to be favored. Turns of water are the object of buying and selling, and are independent of land. A 12-hour turn every week (eight days) comes to some 500 or 600 duros (1939).[124]

312 [821] The hour to begin irrigating is that of the rising or setting of the sun, according to whether the turn itself is diurnal or nocturnal. The repairs depend on their importance and where they are made, the users of the branch in question contributing to these, downstream. The outlets or cuts of water are the responsibility of

312 571 805 the individual who is irrigating at the time. The duration of turns was regulated by means of natural hours, those of the prayers, and by measurements of the shade and the angle of the same with some object, in other words, a true sun dial.

312 627 628 671 Differences were resolved, as noted, by means of arbitration, valuation or assessment, or indemnification, apart from governmental intervention if this is deemed necessary, as some qanuns express.

312 184 The variations in the treatment of ditches require the conformity of all the ditch-users to be expressed by themselves or their representatives personally, in a meeting convoked to this effect on the sites which are to be the objects of modification, in the system or traditions of irrigation.

312 591 613 596 It has a turn cycle of six days, which are distributed among the four lineages (dharfiqin), these in turn dividing their turns among their respective branches (ijujga), in the following order:

1st Day (24 hours): Ajdir (U Hammu; U Haddu)

2nd Day (24 hours): Ughir Iyizan (U Xikhrif; U Yihya u Musa)

3rd Day (24 hours): Ajdir (U Mis'aud u Yusif; W 'Alla w Ujdir)

4th Day (24 hours): Ughir Iyizan (U Dris; W 'Alla Ughir Iyizan)

5th Day (24 hours): Bu Mqathir

6th Day (24 hours): Zawith (Fisra and Andrusen--Ushannen--Thaddallahan--Dharwa nd-Hajj 'Abdinnbi)[133]

On the seventh day, the sequence is repeated.

Sidd Dharga n-Bulma'iz: on the right bank. It begins, as does l-Bzimma, at Bu Harishen, crossing the river in order to divide its water with Dharga n Tfadhna, and each one of these three ditches receives one-third of the permanent flow taken in at Bu Harishen. It runs for a few kilometers and reaches the sea at Swani Waddai (Lower [402] Swani). It moves three mills; the first belonging to the Qa'id Sriman (r-Khattabi) and 'Abdinnbi, the second to I'arhuthen and the third to Dharwa nd-Hajj Si 'Ari Ubarru.[134]

It has a turn cycle of three days for the three dharfiqin indicated, and they in turn distribute the water among their ijujga, which make [805] them up in their own way. The turn begins at the maghrib, or sunset prayer.

1st Day (24 hours): Imhauren: Aith 'Aru Hmid
Aith 'Abdallah u Hmid
Aith Muhand u Hmid
Aith Bu Dhimmus (only when water is scarce)[135]

695 is to be found situated above the ditch of 'Umar bin Yusif al-Waryaghli.
312
[693] This is what the witnesses of the present (act) certify without there being (any) doubt existing in it. A complete attestation.

693 The undersigned notaries who have compiled (the testimonies which
695 these individuals afforded) from them testify that the latter are in a perfect state of legal capacity (i.e. of sound mind and memory) to testify, and they know them (i.e. personally).

[805] On the 21st day of the blessed Sha'ban of the year 1150 (December 13, 1737). Two illegible signatures follow.

19. PURCHASE AND SALE OF AN IRRIGATION TURN: TRANSLATION:

Praise be to the one God.

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432 The Qa'id Sulaiman bin Muhammad al-Waryaghli al-Khattabi al-Ajdiri[176] buys, with the power and force of God, from the one who sells it, Siddiq bin Muhammad bin Siddiq al-'Abdallawi[177], one-fourth (of a part) of the irrigation ditch of Bulma'iz, (in his turn) by day or by night, his turn reappearing about (once) every nine days; on some occasions he gets it during the day, and on others at night. A valid, definitive
432 and firm purchase, so much down, without conditions of resale or op-
[435] tions (to anything) other than that assigned here), for a price the
[436] sum of which is 100 duros, in Spanish money (i.e. 500 pesetas). This amount the abovementioned seller has taken from the abovementioned buyer, thus recognizing it in front of both witnesses instrumental to the present act, freeing the buyer from it, who took over his purchase with complete possession, occupying it in his place of ownership in conformity with the traditional law and the right of rehibitory action

432 (against this sale which was put into effect) after the sight, pleasure and knowledge of his capability as required.

Both parties concerned know the value of the present act, and, by virtue of this, the undersigned witnesses testify to the declarations of both, for both buyer and seller are in a perfect state of legal capacity (of sound mind and memory) to agree; and the witnesses know them both by sight and by name. In the first part of Rabi' al-Thani of the year 1347 (August 19, 1928).

(805)

000 Servant of his God, 'Abd al-Salam bin 'Ali al-Ajdiri, may God be benevolent toward him, amen (signature). Servant of his God, 'Abd al-Karim bin 'Umar al-Khattabi, may God be benevolent toward him, amen. (signature).

Stamp of approval of the qadi: Both 'udul have borne witness (with respect to the above), which he (i.e. the qadi) accepts and to which he gives faith. Servant of his God, Muhammad bin al-Hajj Ahmad al-Bu-Dhimmusi[178], may God be benevolent toward him. Amen. (Signature).

20. SUMMARY OF IRRIGATION:

312 133 In a few words we may show the present day importance and interest of irrigation in the Aith Waryaghar, as tourists from time to time cross this splendid Plain of al-Husaima....

This Plain, under rudimentary cultivation even today (1938), as no one has succeeded or even proposed to amplify it, is completely criss-crossed by an intricate net of tiny irrigation ditches which in general do not feel the touch of water more than every eight days, and some even every eighteen days; and this for winter cultivation.

annual income may be claimed. Informants agreed that a figure of 5% of annual income might not be an inaccurate sum for a member to donate to his zariwya.

Aside from these rather special claims on one's sum of wealth are the regular demands made by one's being a member of the Islamic community. Perhaps the most difficult of these obligations for the Riffian is the hadj or pilgrimage to Hijaz, Mecca, the birthplace of Mohammed, and to Medina where he died. The hadj itself takes place between the seventh and the thirteenth of the twelfth month of the Muslim calendar, the Dhu 'l-Hijja. While in former days men traveled in caravans or by boat, the most popular form of locomotion today is Air Maroc which offers special rates during the period of the pilgrimage. Although the number of Riffians making the trip is, in any one year, not proportionately large, it is a rather significant group. The investment is large, ranging from 3,000 to 6,000 dirhams, depending on the means of transportation and the time spent in getting there and back. If one has a family, which is generally the case, one must (by law) leave behind enough money to provide for their expenses while the pilgrim is away. Only the older, wealthier (and as a consequence most respected) Berbers can become al-Hadj, the honorific title bestowed on those who have completed the journey to Mecca. The trip is not, however, completely voluntary. If a man is prominent and in the minds of the populace of the community well-off, there is a good deal of pressure placed on him, in the form of ridicule, gossip and general public disapproval, if he begs off the pilgrimage.

7: Mikesell K-4,5 (1955-1957) 1961 MX3 Rif MX3

In addition to a common language, certain other culture traits are shared by most Berbers. The Berber arts still differ from the Islamic arts acclimatized in Barbary. Designs on pottery, rugs, and blankets are almost entirely in geometrical patterns. Nothing could be clearer than the contrast between the lozenges and chevrons of Berber work and the complicated floral and epigraphic designs of Levantine art. The simple houses of the Moroccan highlands probably are local variants of the prevalent Mediterranean types, but the multistoried buildings of rammed-mud blocks in southern Morocco show eastern affinity. Indeed, no traveler who has seen the Moroccan *qsar* and the "skyscrapers" of southern Arabia can fail to be impressed by the similarity of the two.[14] Similarity of this sort suggests diffusion of style and techniques from a common center, possibly eastern Africa, which may also have been the main center of the "Hamitic" languages.

A few nonmaterial traits also can be associated with Berber speakers. We can still discern among them the remains of an agrarian animism. The ceremonies that seek to obtain through rain, considered as the male element, the fecundity of the soil, which represents the female, are doubtless of this category. Wherever Berber is spoken, the important events are reckoned by solar months, not by the Muslim lunar calendar.[15]

Until recently the social organization of most Berber-speaking communities differed from the Arab or Muslim order.[16] The Berber districts were characterized by extreme fragmentation into small units, each guided by ideals of independence and self-sufficiency.[17] The cell of each unit was the family. Several families formed clans, with about a hundred members who traced their descent from a common ancestor. In the regions of deep-rooted peasantry, particularly in the mountains, groups of related people were linked by means of assemblies composed of delegates from each family.[18] The function of the assembly was to regulate the tasks and taxes of the community. To ensure the execution of decisions and to facilitate relations with other assemblies, a chief, or elder (*amghar*), was appointed, but he was only the delegate of the assembly and every precaution was taken to prevent aggrandizement of his powers. A prudent rotation arranged for the representatives of the principal families to take office in turn. The territory governed by the

cians. In modified form, it is still used by the Tuareg. G. Marcy, "L'épigraphie berbère numidique et saharienne," *Annales de l'Institut d'Études Orientales*, 2 (1936), 128–164; F. R. Wulsin, "The Prehistoric Archaeology of North-West Africa," Peabody museum of Archaeology and Ethnology, *Papers*, 19 (1941), 111–114.

[14] Cf. the photograph of San'a in Harry Hoogstraal, "Yemen Opens the Door to Progress," *Nat. Geog. Mag.*, 101 (1952), 238, and of Tinerhir in Jean and Franc Shor, "From Sea to Sahara in French Morocco," *ibid.*, 107 (1955), 178–179.

[15] Other examples of pagan survivals in Morocco are given in three works of Edward Westermarck: *Ceremonies and Beliefs Connected with Agriculture, Certain Dates of the Solar Year, and the Weather in Morocco* (Helsinki: Akademiska Bokhandeln, 1913); *Ritual and Belief in Morocco* (London: Macmillan and Co., Ltd., 1926); and *Pagan Survivals in Mohammedan Civilization* (London: Macmillan and Co., Ltd., 1933).

[16] The remarks to follow are based upon Robert Montagne's *Les Berbères et le makhsen dans le sud du Maroc: essai sur la transformation politique des berbères sédentaires (groupe Chleuh)* (Paris: Alcan, 1930).

[17] I use the past tense because the French-sponsored *dahir* of May 16, 1930, which called for a division of Morocco into two districts, one under Qur'anic and the other under tribal law, was repealed on September 4, 1956. Under the present system the functions of the assemblies are exercised by officials appointed in Rabat.

[18] With excellent insight, Konrad Wiche, "Marokkanische Stadttypen," in *Festschrift zur Hundertjahrfeier der geographischen Gesellschaft in Wien, 1856–1956* (Vienna, 1957), p. 492, describes the Berber assemblies as *Talschaften* (valley associations).

7: Mikesell K-4,5 (1955-1957) 1961 MX3 Rif MX3
Jebala MX2

The Agricultural Calendar

Moroccan agriculture is conducted on the basis of the Julian almanac, and the Latin names for the months have passed with but slight changes into Arabic and Berber. In most of northern Morocco the agricultural cycle involves a combination of dry farming, horticulture, and the cultivation of small irrigated plots. Dry farming as practiced in the Mediterranean region is essentially a matter of farming the same land every other year and of tilling it during the fallow period. In this way as much moisture as possible is kept in the ground for the next year. Since few communities can produce enough grain during the alternate seasons to allow for the fallow years, dry farming requires constant clearing of new land.

In the hilly areas of Jbala and Ghmara the beginning of the agricultural year is marked by fires set to clear new fields, and the haze of smoke lingers until the arrival of the first rains. By the end of the summer drought, animals are weakened by the scarcity of feed; and wherever the soil is clayey the drought-hardened surface is difficult to plow. So the farmer waits for the first rains for plowing and the second for seeding. After the soil has been turned, cereals, usually barley or hard wheat, are broadcast. Then the soil is again worked with the plow and, since Moroccans do not use the harrow, clods are broken with clubs or hoes.

In the western half of the northern zone, plowing usually begins toward the end of September, and sowing is completed by the beginning of November. In the eastern sector the first heavy rains may not come until March or April. In this event, no further thought is given to barley or wheat, and a desperate effort is made to prepare the soil for a summer crop of sorghum. When cereals are sown, the feverish activity of autumn gives way to a period of virtual hibernation. Only the women keep busy, for there is always need for fodder and fuel.

In frost-free areas, February marks the beginning of the work of planting, pruning, grafting, and fertilizing the fruit and nut trees. This task continues through March and April. In the lower areas of the Rif the most common trees are the fig, pomegranate, almond, and olive. In the highlands walnuts are most important. Trees are cared for assiduously, for dried figs, raisins, and nuts constitute the principal food reserves after the cereals have been consumed. Since they do not have to be watered, figs and vines usually occupy the higher and steeper slopes. New olive trees are usually obtained by grafting on the oleaster. The olives are often left so long in heaps on the ground that they begin to ferment, and the oil is very rancid when the fruit is eventually pressed.

The arduous task of rebuilding terraces, dams, and ditches begins in March. This work is not yet finished when it is time to begin the harvest of the cereals. The shortage of manpower at this time is offset by the women, who reap the grain with sickles and carry it to threshing floors. There it remains until the men have completed the planting of the summer crops. Then all effort is devoted to threshing and winnowing. This work begins in July and in bountiful years it may still be in progress when the first rains fall. Threshing takes place on communal floors, which may or may not be paved. These are always in an exposed position, and when the mixture of grain and straw is thrown in the air, it is separated

7: Mikesell K-4,5 (1955-1957) 1961 MX3 Rif MX3
Senhaja MX4

The introspective character of rural Morocco is enhanced by the weekly trading market or *suq* (plural *aswaq*). These markets attract urban merchants, craftsmen, and entrepreneurs, but their principal function is to serve as outlets for the products of local specialization. One family comes to market with a basket of figs, and another with a pannier of walnuts. After an interval of haggling, each leaves with the specialty of the other. Exchange of this sort helps to add variety to the diet, and encourages an intelligent appraisal of local conditions of soil and climate. Staple foods seldom enter into this exchange. The goal of each community is to be self-sufficient in breadstuff. A few commodities, such as sugar, salt, tea, and kerosene, are imported from the cities, but the chief function of the weekly market is to satisfy the modest wants of dispersed communities engaged in subsistence agriculture.

Markets are held in the open, at predetermined sites that are deserted during the rest of the week. In each tribal area one or more sites are reserved as market places and named as follows: *had* (Sunday), *tnine* (Monday), *tlata* (Tuesday), *arba* (Wednesday), *khemis* (Thursday), *jema* (Friday), and *sebt* (Saturday).[a] On the morning of the appointed day, streams of people converge on the market place. The *suq* is much more than a market in the economic sense of the word; it is also a social and political assembly of great importance in tribal life. Market day is the time for legal transactions and all manner of negotiation. By nightfall tribal authorities have resolved most of the problems of the week.

There is great variation in the size and influence of markets. In 1949 authorities of the Spanish protectorate made a study of the volume of business transacted at each *suq*. About a hundred markets were located; the annual volume of business, including barter, averaged about 10,000,000 pesetas per market. About a fourth of the markets had an annual business estimated at more than 65,000,000 pesetas (table 5). Most of the larger or regional markets are in the populous Rif (fig. 24). In the sparsely settled area of Sanhaja as-Srair, only one market, Tlata Ktama, serves as a trading center for more than one tribe. Khemis Izagan (pl. 7, *b*), with trade estimated at 3,000,000 pesetas, is typical of the smaller local markets.

Each market has four main functions: (1) distribution of local products, (2) exchange of rural surpluses or specialties for urban goods, (3) circulation of articles such as pottery and millstones from villages which specialize in making them, and (4) dissemination of foreign imports. The larger markets differ from the smaller in their greater emphasis on the latter two functions. Moreover, the larger markets are usually located at the convergence of communication lines and on the frontiers of complementary production zones.[b]

Emigration

Unfortunately, the weekly markets do not compensate for uneven distribution of population and productive land. Few communities are able to accumulate

[TEXT CONTINUED ON PAGE 93]

[a] On French maps the names of the days of the week appear as *had, tnine, tleta, arba, khemis, djemaa,* and *sebt;* on Spanish maps the usual spellings are *had, tenin, telata, arbaa, jemis, yumaa,* and *sebt.*

[b] On the location and function of markets and the changes caused by recent improvement in communications, see M. W. Mikesell, "The Role of Tribal Markets in Morocco," *Geog. Rev.*, 48 (1958), 494–511.